

FULFILLMENT FACTORY

Future-proof answers to the growing e-commerce market



SSI SCHAEFER - YOUR SYSTEM SPECIALIST FOR THE CHALLENGES IN DIGITAL BUSINESS

800.342.8994 - www.mcurraystern.com



The traditional sales channels retail business and mail-order business are increasingly merging. In many areas, they have transformed into multi-channel or omni-channel operations. The continuing growth of e-commerce results in increasingly complex and demanding delivery chains.

Effective solutions are essential for

- ✓ Returns handling
- ✓ Storage of a large number of SKUs
- ✓ Fast delivery after receiving the order (same-day delivery)
- ✓ Efficient handling of constantly changing workloads

SSI SCHAEFER began to address these changes from the outset and established a team of experts for the e-commerce market to develop the necessary solutions. The Fulfillment Factory is one of these intelligent concepts. It is a modular system for optimizing picking processes and order

Higher product diversity and shorter product cycles create new challenges for intralogistics. The Fulfillment Factory is the efficient solution to these requirements.



processing and it is ideal for e-commerce applications. This enables exceptionally efficient processing for constantly changing order compositions in any desired combination, while significantly reducing the costs of fulfilling very small orders.

Uniquely configured for you

Our experts dimension the system after assessing your operational requirements, ensuring it is perfectly tailored to your business. Where necessary, entire facilities are simulated to create a proof of concept and safeguard your investment.

YOUR BENEFITS FROM THE FULFILLMENT FACTORY

- More efficient personnel usage through reducing the number of product touches
- Integration of returns and immediate transfer to the sales process
- Extremely short throughput times for customer orders
- B2B and B2C orders can be mixed
- Shop-friendly and customer-friendly deliveries
- Highest process reliability
- High system performance, scalable from 1,500 to > 30,000 items/hour
- Fast Return on Investment (ROI)
- Scalability resulting from modular design

OPTIMIZED PICKING, INTEGRATED RETURNS HANDLING

The Fulfillment Factory optimizes picking and storage processes in numerous sectors. Furthermore, you can dynamically sort and sequence while simultaneously integrating returns, enabling you to achieve high throughput, while processing B2C and B2B orders at the same time. This makes the Fulfillment Factory especially interesting for a diverse range of products such as clothing, shoes, electrical articles, toys, household devices, pharmaceuticals, cosmetics and other consumer goods.

One solution, many benefits:

1

STORING & PICKING

More efficient picking

The Fulfillment Factory improves the efficiency of manual, semi-automated and fully automated picking.

Picking with picking trolleys

Products can be picked in batches (batch picking) to bins which are then transported to the in-feed stations.

2

NEW GOODS IN-FEED & RETURNS

High-performance in-feed station

Products are removed individually from the picking bins, scanned and placed in pouches. Automatic linking of the product and the RFID tag of the Carrier.

3

BUFFERING & PRE-SORTING

Dynamic buffer

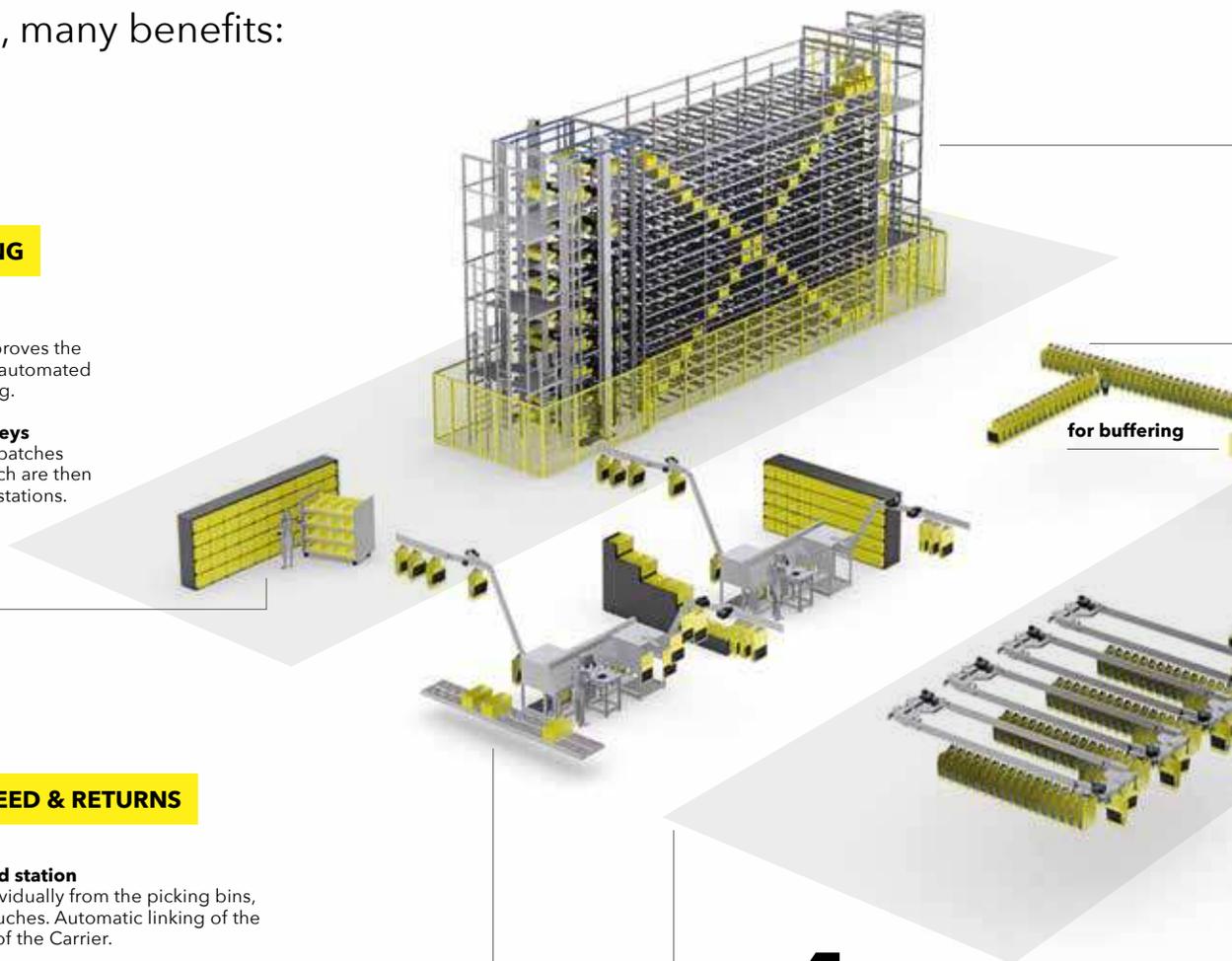
Products for short-term storage are transferred directly from in-feed to the dynamic buffer, a number of carousels that enable fast retrieval.

4

SEQUENCING

Matrix sorter

Sequencing products into a picking batch and consolidating all products for a specific order. Transport to the packing stations on the same conveyor.



Maximum performance with minimum space

The Fulfillment Factory can make highly effective use of the available space because it primarily consists of overhead conveyor components. This leaves valuable floor space free as the storage and sorting systems are located above the operating areas.

The Fulfillment Factory can also be easily retrofitted in existing distribution centers as a stand-alone solution.

Benefits at a glance:

- ✓ Flexible usage of building structures
- ✓ Interfaces to existing storage systems
- ✓ Easy integration into existing IT structures

The Fulfillment Factory works optimally in combination with warehousing, conveying and picking systems by SSI SCHAEFER.

Automatic storage and retrieval

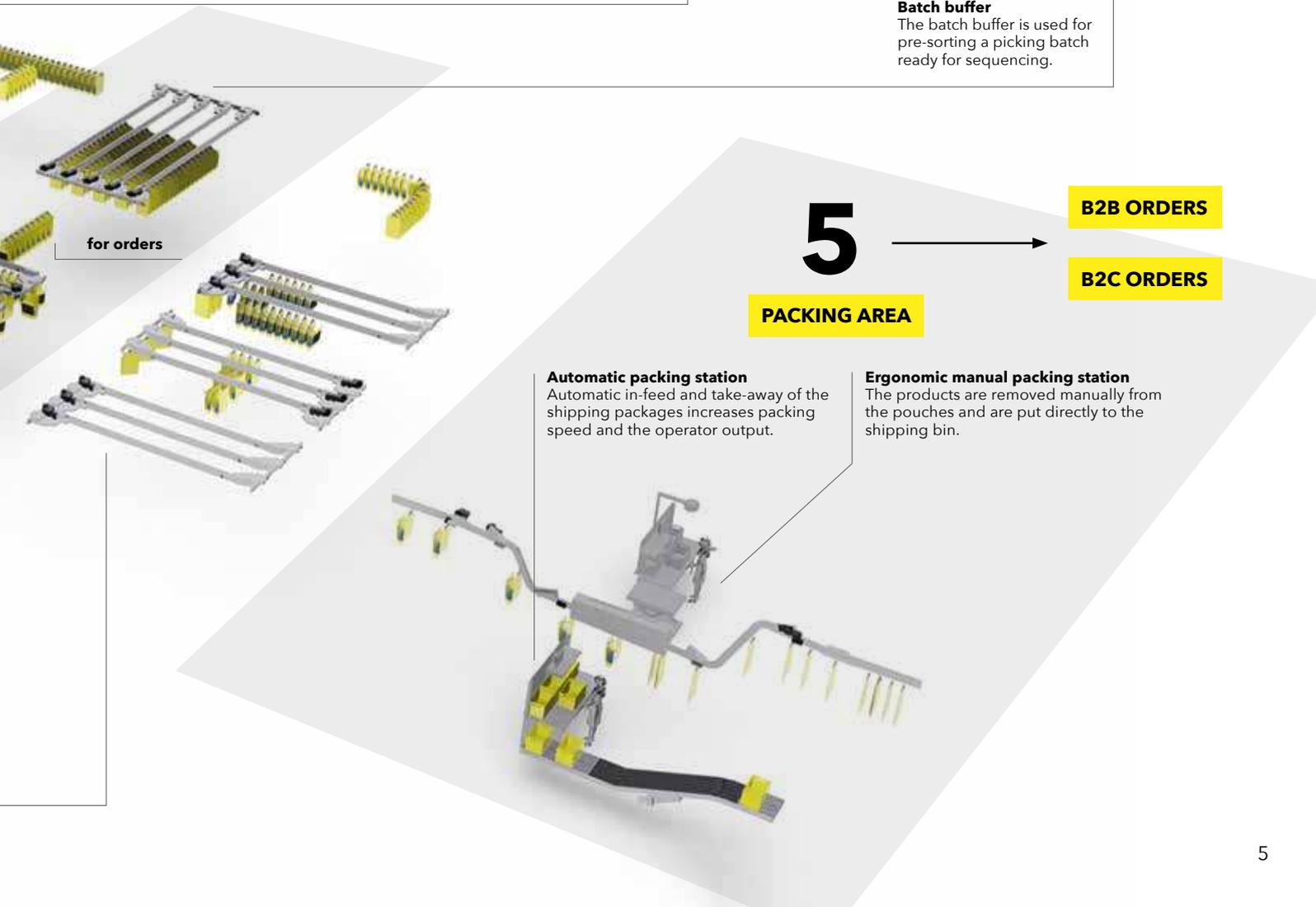
Automation enables the space-saving storage of cartons or bins, together with maximum picking performance.

Directly to the buffer

Direct supply to the system avoids the work involved with storage and picking, such as returns stored temporarily in the dynamic buffer.

Batch buffer

The batch buffer is used for pre-sorting a picking batch ready for sequencing.



EFFORTLESS ACCUMULATION, BUFFERING, DISTRIBUTION AND SORTING

An overhead conveying system is the central element of the Fulfillment Factory and can transport loads of up to 10 kg. The load carriers are equipped with an RFID transponder or a barcode. This prevents errors and achieves high reliability.

Load range up to 3 kg: SSI Carrier

The SSI Carrier is a modular system for conveying, buffering, sorting and sequencing. The centerpiece is the primary load carrier, an internally guided roller adapter where different secondary load carriers like hangers or pouches can be attached, transported and identified.

Load range up to 10 kg: SSI Mover

The SSI Mover is our e-commerce solution for heavy goods. Furthermore, it is especially suitable for automatic buffering and sequencing. The system utilizes gravity, making it exceptionally economical and energy efficient.



Dynamic buffer

Returns are delivered directly to the dynamic buffer, where they can be immediately picked for a subsequent order. With cross docking, the goods are stored directly in the dynamic buffer. The pouches are then prioritized for new orders and transferred to the batch buffer. This is an optimum solution for just-in-time or same-day delivery.

Matrix sorter

The Matrix sorter sorts the load carriers, transforming chaotic batches into an orderly sequence of customer orders. Entire lines are taken from the batch buffer and run through one or multiple sorting stages. As a result, the orders can be packed in sequence at the packing stations or processed in the desired order.

Easy integration and intelligent software

Ergonomic delivery and packing stations are the interfaces to your existing processes. That is why the Fulfillment Factory can be connected to both existing manual and automated warehouses. Sophisticated and user-friendly software for steering and controlling all of the functions is an integral element of the Fulfillment Factory. It consists of the WAMAS® logistics software developed by SSI SCHAEFER and can be easily integrated into existing IT environments.

AT A GLANCE

- Precision and error prevention through the use of RFID and barcodes
- Optimized sorting process
- Reduced number of product touches
- Rapid re-availability of returns
- User-friendly due to easy operation
- Ergonomic work stations
- Flexibility as a result of optimum space usage and short cycle times
- Compact design enables integration into existing warehouses
- One-stop solution: production, planning, installation, commissioning, service



SIX REASONS FOR CHOOSING MCMURRAY STERN:

- **Security:**

As a financially independent family business we are committed to long-term solutions. You can trust that we will be there for you tomorrow and in the years to come.

- **Efficiency:**

Our solutions are scalable and grow with your business. An SSI SCHAEFER solution is a future-oriented investment.

- **Quality:**

As a specialist in automation, we provide a single-source solution. As an original equipment manufacturer we guarantee quality and the right solutions for your needs.

- **Reliability:**

Thanks to our world-wide Customer Service & Support network we ensure a smooth operation of your system.

- **Know-how:**

Our solutions are always up-to-date with the latest technological standards and are easily integrated into an existing (IT) landscape.

- **Internationality:**

As a globally acting company we have local offices worldwide and our team of experts speaks your language.